

40000-0003 (50P4201)

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REMARKS

This is a full and timely response to the final Official Action mailed on June 16, 2004 (Paper No. 4). Reconsideration of the application in light of the following remarks is respectfully requested.

No amendments are made by this paper, as explained above. Claims 3-8, 11-16, 18, 19 and 21-29 remain pending for consideration.

With regard to the prior art, claims 1, 3-9 and 11-29 were rejected as unpatentable under 35 U.S.C. § 103(a) over the combined teachings of U.S. Patent Publication No. 2002/0104097 to Jerding et al. ("Jerding") and U.S. Patent Publication No. 2002/0116706 to Bahraini ("Bahraini"). Claims 2 and 10 were rejected as unpatentable over the combined teachings of Jerding, Bahraini and U.S. Patent No. 5,883,901 to Chiu et al. ("Chiu"). For at least the following reasons, these rejections are respectfully traversed.

Claim 23 recites:

A set-top unit for connection to a cable television system comprising:
a control channel tuner;
at least one programming tuner; and
a processor for controlling both said tuners;
wherein said processor is configured to concurrently control both said control channel tuner and said at least one programming tuner to scan a frequency band to locate a control channel.
(emphasis added).

In contrast, the combination of Jerding and Bahraini fails to teach or suggest using two tuners concurrently, a control channel tuner and a programming tuner, to locate a control channel. As represented by the Office, Jerding teaches a set-top including two tuners, and Bahraini teaches using a single tuner to scan for a control channel. However, neither

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reference teaches or suggests a set-top unit that includes and concurrently uses two tuners to scan a frequency band to locate a control channel, as claimed.

The recent Advisory Action of November 2, 2004 agrees that "neither Jerding nor Bahraini show controlling the [two] tuners concurrently." Consequently, the Advisory Action takes official notice "that is it well known and expected in the art to control two tuners at the same time." Even if this were so, it does not mean that it is well known in the art to control two tuners concurrently to locate a control channel as claimed.

However, it is not true that it is well-known to use two similar tuners concurrently, both of which can search for a control channel as claimed. In support of the Official Notice taken, the Advisory Action cites new prior art, namely, U.S. Patent No. 6,807,676 to Robbins et al. ("Robbins"). Robbins, however, as cited in the Advisory Action, teaches a video tuner (120) and a digital *audio* tuner (202) that are used simultaneously. The audio tuner (202) is in a separate module, while the video tuner (120) is part of a settop terminal (112). The audio tuner (202) would not be capable of locating or tuning a control channel in a cable television system. Thus, Robbins *cannot* support the position that it would have been obvious to concurrently use two similar tuners. More importantly, Robbins does not teach or suggest concurrently using two similar tuners in a set-top unit *to locate a control channel* as claimed.

The simple fact is that no prior art of record teaches or suggests the claimed set-top unit that includes two tuners and that uses those tuners concurrently to locate a control channel in a cable television system. The Office has failed to indicate how or where the cited prior art teaches using two tuners concurrently to locate a control channel as claimed.

The Office concedes that Jerding and Bahraini do not teach concurrent use of two tuners. Robbins simply teaches the concurrent use of two different types of tuners, a single video tuner and an audio tuner in a separate module.

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"To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)." M.P.E.P. § 2143.03. Accord. M.P.E.P. § 706.02(j). For at least this reason, the rejection of claims 23-27 should be reconsidered and withdrawn.

Claim 28 recites:

A set-top unit for connection to a cable television system comprising:
a control channel tuner;
two or more programming tuners; and
a processor for controlling said tuners;
wherein said processor is configured to concurrently control said programming tuners to scan a frequency band to locate a control channel.

As demonstrated above, the combination of Jerding, Bahraini and Robbins fails to teach or suggest using two or more tuners *concurrently* to scan a frequency band to locate a control channel, as claimed. Again, "[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)." M.P.E.P. § 2143.03. Accord. M.P.E.P. § 706.02(j). For at least this reason, the rejection of claims 28 and 29 should be reconsidered and withdrawn.

Claim 6 recites:

A set-top unit for connection to a cable television system comprising:
a control channel tuner;
at least one programming tuner; and
a processor for controlling said tuners;
wherein said processor controls said at least one programming tuner to scan a frequency band to locate a control channel;
wherein said processor divides said frequency band among said control channel tuner and said at least one programming tuner, and controls each said tuner to search a different portion of said frequency band for said control channel.

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(emphasis added).

Claims 14, 19 and 22 recite similar subject matter.

Thus, these claims, as exemplified by claim 6, again recite that two similar tuners, a control channel tuner and a programming tuner, are used together to locate a control channel. The frequency band to be searched is divided among the two tuners so that the search can be completed more quickly.

As demonstrated above, the combination of Jerding, Bahraini and Robbins fails to teach or suggest concurrently using two tuners to search for a control channel. The combination further fails to teach or suggest dividing a frequency band among the two tuners as described in claim 6.

In response, the Advisory Action again resorts to taking Official Notice that it is well known to split up a task among similar components to facilitate processing. This, however, is irrelevant. The combination of references cited does not teach or suggest using multiple similar components to conduct a single task, e.g., searching for a control channel. Thus, even if the Official Notice taken is given credit, the prior art still does not teach or suggest a processor that divides a frequency band among two similar tuners in a search for a control channel.

In support of the Official Notice taken, the Advisory Action cites U.S. Patent No. 5,220,580 to Heberle et al. ("Heberle"). However, Heberle does not teach or suggest dividing up a frequency band among two tuners in the search for a control channel. Heberle rather teaches synchronization of a phase-locked loop. Thus, if the teachings of Heberle were combined with those of Jerding, Bahraini and Robbins, the combination still would not teach or suggest dividing a frequency band among multiple tuners that are concurrently controlled to search for a control channel in that frequency band, as claimed.

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Again, "[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)." M.P.E.P. § 2143.03. Accord. M.P.E.P. § 706.02(j). For at least this reason, the rejection of claims 6-8, 14-16, 19 and 22 should be reconsidered and withdrawn.

Claim 3 recites:

A set-top unit for connection to a cable television system comprising:
a control channel tuner;
at least one programming tuner; and
a processor for controlling said tuners;
wherein said processor controls said at least one programming tuner to scan a frequency band to locate a control channel;
wherein said processor controls said at least one programming tuner to tune frequencies in said frequency band and identify frequencies carrying an active signal;
and
wherein said processor controls said control channel tuner to tune said frequencies carrying an active signal to locate said control channel.

(emphasis added).

Claims 11, 18 and 21 recite similar subject matter.

Thus, these claims, as exemplified by claim 3, again recite that two tuners, a control channel tuner and a programming tuner, are used together to locate a control channel. One tuner is used to search for frequencies carrying an active signal, while the second tuner is used to tune those frequencies with active signals to determine which is a control channel.

As demonstrated above, the combination of Jerding, Bahraini and Robbins fails to teach or suggest using two tuners to search for a control channel. The combination further fails to teach or suggest using the two tuners as described in claim 3, one to search for active signals and one to determine if an active signal, once located, is a control channel.

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The Advisory Action likewise fails to indicate how or where the prior art teaches this subject matter. As noted above, Jerding teaches a set-top including two tuners, and Bahraini teaches using a single tuner to scan for a control channel. Nowhere does this combination teach or suggest using two tuners concurrently, let alone using one to find active signals and the second to follow up to determine if any of the active signals are control channels.

Again, "[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)." M.P.E.P. § 2143.03. Accord. M.P.E.P. § 706.02(j). For at least this reason, the rejection of claims 3-5, 11-13, 18 and 21 should be reconsidered and withdrawn.

In none of the foregoing rejections has the Office succeeded in making out a *prima facie* case of unpatentability. Each of the rejections made relies, fatally, on ineffective Official Notice, inaccurate arguments of inherency and general attempts to read subject matter into the cited prior that is not, in fact, taught or suggested. It is incumbent upon the office to identify where in the cited prior art *each* claimed element may be found. *Ex parte Levy*, 17 U.S.P.Q.2d 1461 (BPAI 1990). Consequently, when the Office fails to identify a claimed element, the Office has failed to establish a *prima facie* case of unpatentability.

In the present case, the cited prior art does not anywhere teach or suggest the concurrent use of two tuners to locate a control channel. The cited prior art does not anywhere teach or suggest dividing a frequency band among two concurrently-operating tuners to locate a control channel. The cited prior art does not teach or suggest using one tuner to locate active frequencies and a second tuner to determine whether those active frequencies carry a control channel.


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For the foregoing reasons, the present application is thought to be clearly in condition for allowance. Accordingly, favorable reconsideration of the application in light of these remarks is courteously solicited. If any fees are owed in connection with this paper which have not been elsewhere authorized, authorization is hereby given to charge those fees to Deposit Account 18-0013 in the name of Rader, Fishman & Grauer PLLC. If the Examiner has any comments or suggestions which could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the number listed below.

Respectfully submitted,

DATE: 13 December 2004


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DATE OF DEPOSIT: December 13, 2004

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail on the date indicated above in an envelope addressed to: MS-AE, Commissioner for Patents, Alexandria, VA 22313-1450.


Rebecca R. Schow

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Applicant Initiated Interview Request Form

Application No.: 09/711,325 First Named Applicant: Robert Allan Unger
Examiner: Nalevanko, Christopher R. Art Unit: 2611 Status of Application: Pending

Tentative Participants:

(1) Steven L. Nichols (2) Nalevanko, Christopher R.
(3) _____ (4) _____

Proposed Date of Interview: December 27, 2004 Proposed Time: 1:00 (EST) (AM/PM)

Type of Interview Requested:

(1) ☒ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☒ NO

If yes, provide brief description: _____

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) <u>Re.</u>	<u>3-8, 11-16, 18, 19 and 21-29</u>	<u>2002/0104097 2002/0116708</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(3) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(4) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Continuation Sheet Attached					

Brief Description of Arguments to be Presented:

Second After-Final Amendment filed herewith.

An interview was conducted on the above-identified application on _____.

NOTE: This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Steven L. Nichols
Applicant/Applicant's Representative Signature

Examiner/SPE Signature

Steven L. Nichols
Typed/Printed Name of Applicant or Representative

40,326
Registration Number, if applicable

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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